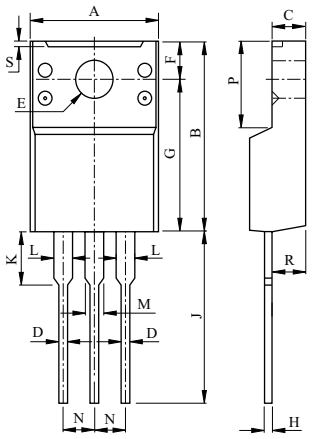
KTA1659/A

EPITAXIAL PLANAR PNP TRANSISTOR

HIGH VOLTAGE APPLICATION.

FEATURES

- High Transition Frequency : f_T=100MHz(Typ.).
- Complementary to KTC4370/A.



DIM	MILLIMETERS
A	10.0±0.3
B	15.0±0.3
C	2.70±0.3
D	0.76+0.09/-0.05
E	Φ3.2±0.2
F	3.0±0.3
G	12.0±0.3
H	0.5+0.1/-0.05
J	13.6±0.5
K	3.7±0.2
L	1.2+0.25/-0.1
M	1.5+0.25/-0.1
N	2.54±0.1
P	6.8±0.1
Q	4.5±0.2
R	2.6±0.2
S	0.5 Typ

TO-220IS

MAXIMUM RATING (Ta=25℃)

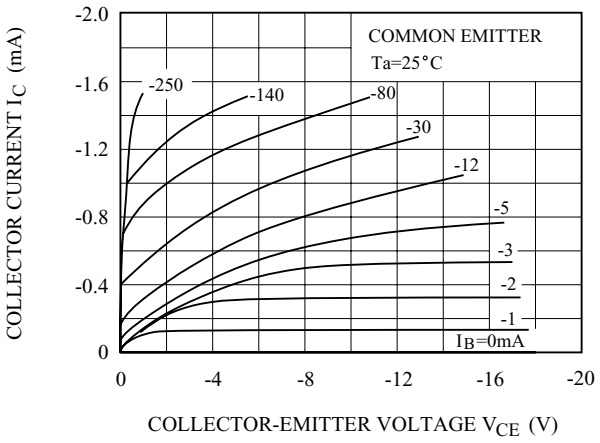
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	KTA1659	V_{CBO}	-160	V
	KTA1659A		-180	
Collector-Emitter Voltage	KTA1659	V_{CEO}	-160	V
	KTA1659A		-180	
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current		I_C	-1.5	A
Base Current		I_B	-0.15	A
Collector Power Dissipation (Tc=25℃)		P_C	20	W
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55～150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

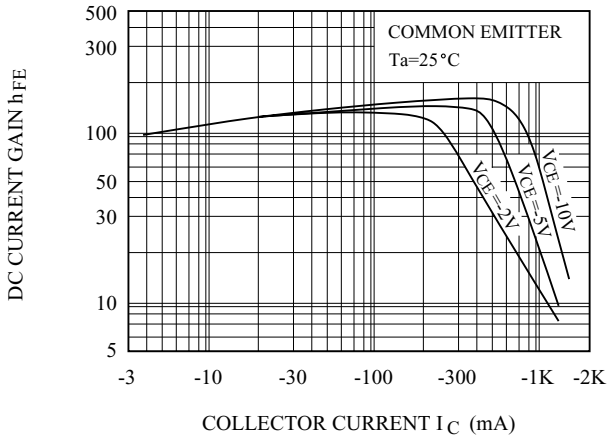
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=-160V, I_E=0	-	-	-1.0	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-1.0	μA
Collector-Emitter Breakdown Voltage	KTA1659	$V_{(BR)CEO}$	I_C=-10mA, I_B=0	-160	-	-	V
	KTA1659A			-180	-	-	
DC Current Gain		h_{FE} (Note)	V_{CE}=-5V, I_C=-100mA	70	-	240	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA	-	-	-1.5	V
Base-Emitter Voltage		V_{BE}	V_{CE}=-5V, I_C=-500mA	-	-	-1.0	V
Transition Frequency		f_T	V_{CE}=-10V, I_C=-100mA	-	100	-	MHz
Collector Output Capacitance		C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	30	-	pF

Note : h_{FE} Classification O:70~140, Y:120~240

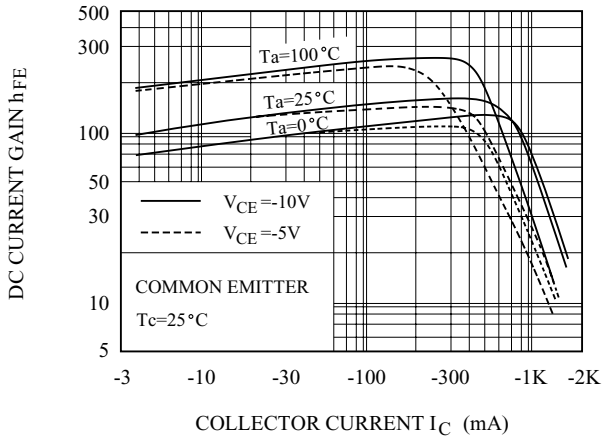
I_C - V_{CE}



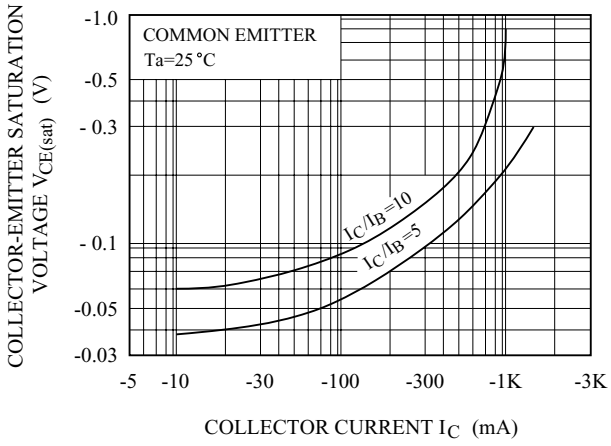
h_{FE} - I_C



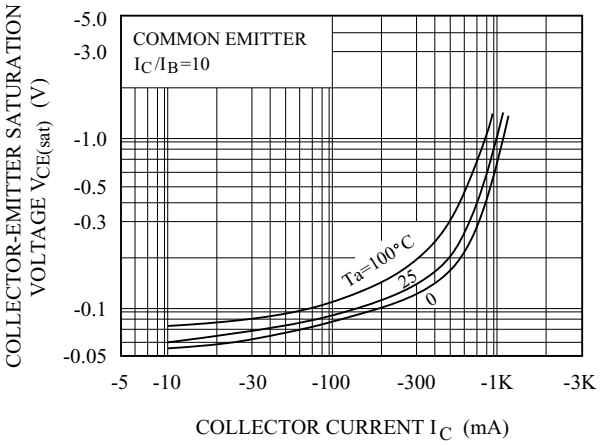
h_{FE} - I_C



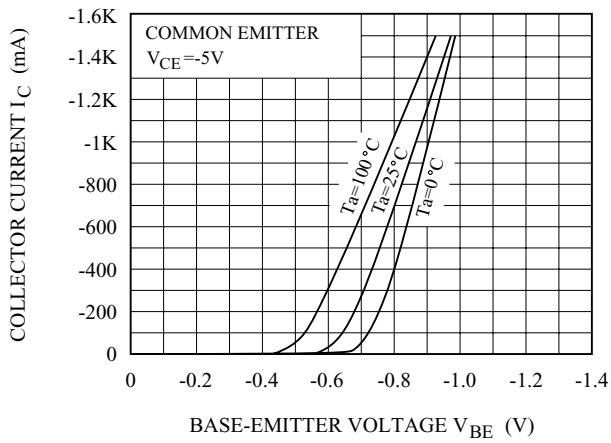
$V_{CE(sat)}$ - I_C



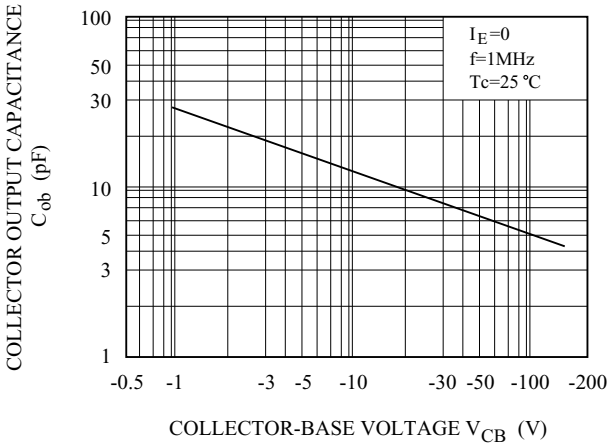
$V_{CE(sat)}$ - I_C



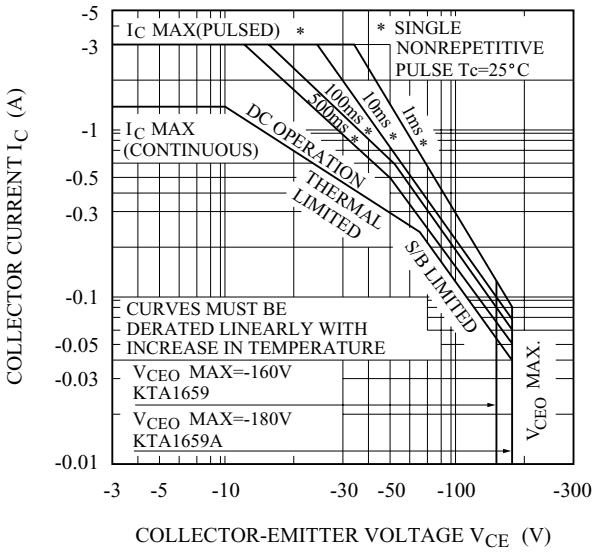
I_C - V_{BE}



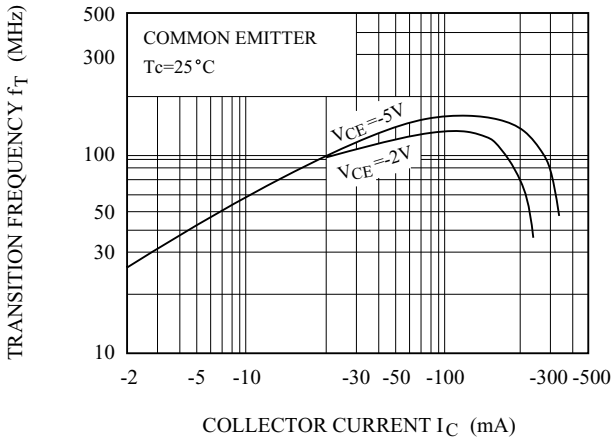
C_{ob} - V_{CB}



SAFE OPERATING AREA



f_T - I_C



Pc - Ta